

**RADIOCHEMISTRY TECHNICIAN  
JOB PERFORMANCE MEASURE****TASK CODE:** TRC-F01**TASK:** Prepare Reagents**NAME:** \_\_\_\_\_ **SSN:** \_\_\_\_\_

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**REFERENCES:**

1. WP 12-RL1011, Elemental Separation - Fission Products
2. WP 12-RL1012, Elemental Separation - Transuranic Products

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**TERMINAL OBJECTIVE:**

Given the necessary chemicals, prepare the required reagents per WP 12-RL1011 and WP 12-RL1012.

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**CONSEQUENCES OF INADEQUATE PERFORMANCE:**

Improper analysis results  
Hazardous waste spills

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**HAZARDS (PERSONNEL/EQUIPMENT STATUS):**

Exposure to concentrated acids and caustics

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**PRE-REQUISITE TRAINING/ TASK COMPLETION:**

1. CF 4.00 Series
2. TRC-A04, Maintain Radiochemistry Laboratory Logbook
3. TRC-A06, Maintain Radiochemistry Laboratory Equipment

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**TOOLS/EQUIPMENT (MATERIALS REQUIRED):**

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|---------------------------|------------------------|
| 1. Deionized water        | 4. Suitable containers |
| 2. Concentrated Chemicals | 5. Balances/scales     |
| 3. Graduated cylinders    | 6. Labels              |

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**Instructions to Trainee:** You shall acquire the necessary references and equipment, and complete all required documentation. Knowledge requirements shall be completed with 80% or greater accuracy. Critical step performance shall be completed with 100% accuracy.

**Instructions to JPM Evaluator:** The trainee is to perform the terminal objective, without assistance, on the job site. Provide clarification of requirements if requested by the trainee. You are encouraged to ask relevant questions to verify trainee understanding. If the trainee fails this JPM, clearly document the reason for failure and forward to the trainee's manager. Successful completion of this JPM shall be recorded on the trainee's qualification card.

**KNOWLEDGE REQUIREMENTS:**

Reference	Knowledge Requirement	Pass/Fail
1,2	State the PPE required when handling acid or caustic solutions.	
1,2	State the PPE required when handling dry concentrated chemicals.	
1,2	Describe the various containers available that are suitable for reagent preparation.	
1,2	Discuss the operation of the balance or a scale.	
1,2	Describe the procedure for mixing acid and deionized water.	
1,2	State the requirements for documentation of reagent preparation.	
1,2	Describe the storage requirements for prepared reagents and the concentrated chemicals.	
1,2	Describe the information that must be placed on prepared reagents.	

**PERFORMANCE REQUIREMENTS:**

Reference	Performance Requirement	Pass/Fail
1,2	Don the appropriate PPE.#	
1,2	Acquire the required constituents for preparing a pre-determined reagent.	
1,2	Select a suitable container for the reagent being prepared.#	
1,2	Prepare a caustic reagent.#	
1,2	Prepare an acid reagent.#	
1,2	Prepare a reagent requiring a dry constituent to be added.#	
1,2	Place the prepared reagent and the associated constituents in the proper storage locations	

1,2	Document the prepared reagents	
1,2	Label the prepared reagents	

# indicates a critical step

**FINAL EVALUATION:**

PASS

FAIL

**COMMENTS:**

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**EVALUATOR SIGNATURE:**

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**DATE:**\_\_\_\_\_

**TRAINEE SIGNATURE:**

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**DATE:**\_\_\_\_\_

**MANAGER SIGNATURE:**

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**DATE:**\_\_\_\_\_